**PASCAL**

program unit8\_1;

var

rate, factor : integer;

begin

writeln('Enter the rate:');

readln(rate);

if ((rate = 1) or (rate = 2)) then

factor := 2 \* rate - 1

else if ((rate = 3) or (rate = 5)) then

factor := 3 \* rate + 1

else if (rate = 4) then

factor := 4 \* rate - 1

else if ((rate = 6) or (rate = 7) or (rate = 8)) then

factor := rate - 2

else

factor:= rate;

writeln('Value of factor:');

writeln(factor);

end.

**C**

#include <stdio.h>

int main()

{

int rate,factor;

printf("Enter the rate: ");

scanf("%d",&rate);

if ((rate == 1) || (rate == 2))

factor = 2 \* rate - 1;

else if ((rate == 3) || (rate == 5))

factor = 3 \* rate + 1;

else if ((rate == 4))

factor = 4 \* rate - 1;

else if ((rate == 6) || (rate == 7) || (rate == 8))

factor = rate - 2;

else

factor = rate;

printf("Value of factor: %d ",factor);

return 0;

}

**FORTRAN 77**

program unit8\_1

implicit none

integer :: factor,rate

print \*,'Enter the rate: '

read \*,rate

if( (rate == 1) .or. (rate == 2) ) then

factor = 2 \* rate - 1

else if( (rate == 3) .or. (rate == 5) ) then

factor = 3 \* rate + 1

else if( rate == 4 ) then

factor = 4 \* rate - 1

else if( (rate == 6) .or. (rate == 7) .or. (rate == 8) ) then

factor = rate - 2

else

factor = rate

end if

print\*, "Value of factor: ", factor

end program unit8\_1

**Python**

print("Enter the rate: ")

rate=int(input(""))

if (rate == 1) or (rate == 2):

factor = 2 \* rate - 1;

elif ((rate == 3) or (rate == 5)):

factor = 3 \* rate + 1;

elif (rate == 4):

factor = 4 \* rate - 1;

elif ((rate == 6) or (rate == 7) or (rate == 8)):

factor = rate - 2;

else:

factor = rate;

print("Value of factor: ")

print(factor)

**Ada**

with Ada.Text\_IO; use Ada.Text\_IO;

with Ada.Integer\_Text\_IO; use Ada.Integer\_Text\_IO;

procedure calc\_factor is

rate : Integer;

factor : Integer;

begin

Put ("Enter the rate: : ");

Get (rate);

if rate = 1 or rate = 2 then

factor := 2 \* rate - 1;

elsif rate = 3 or rate = 5 then

factor := 3 \* rate + 1;

elsif rate=4 then

factor := 4 \* rate - 1;

elsif rate = 6 or rate = 7 or rate=8 then

factor := rate - 2;

else

factor := rate;

end if;

Put ("Value of factor: ");

Put (factor);

end calc\_factor;